REMARKS

Claims 1 – 8 remain pending in the present application. The allowability of claims 7 and 8 is appreciated. Claims 1, 3, 5 and 6 were amended to clarify features of the present invention. The rejections set forth in the Office Action are respectfully traversed below.

Rejections Under 35 U.S.C. §103

Claims 1 – 6 were rejected under 35 U.S.C. §103 over **Koike** (EP 0 953 963).

With regard to claims 1 – 4, the Office Action referred to column 8, lines 23 – 43 of **Koike** for allegedly disclosing the claimed threshold value control means that controls the value of the second threshold value, depending on the level of the video data. In particular, the Office Action alleged that the cited portion of **Koike** describes "wherein the threshold value is set to be larger or smaller [than] the predetermined threshold value, in which the smaller value is to be set slightly larger than the value of the noises in order to prevent these noises as being read as data."

This is not correct. Paragraph [0039] (column 8, lines 38 – 43) of **Koike** discloses a preferred setting of the threshold value to be a large value or a small value. This threshold value is the one and only "predetermined" threshold value discussed at paragraph [0038] (column 8, lines 23 – 37). Basically, the cited portion of **Koike** merely describes the preferred value for initially setting the "predetermined threshold value" used by the horizontal image start/end detection circuit 51. Once this "predetermined threshold value" is set, it is not changed. There is only one single "predetermined threshold value" used by the horizontal image start/end detection circuit 51.

Koike does not teach or suggest the present claimed threshold value control means that ***changes*** the value of the ***second*** threshold value. Independent claims 1 and 3 recite "a ***first*** threshold value" that is used by the horizontal video ***start*** position detection means. This is different than the "***second*** threshold value" used by the horizontal video ***end*** position detection means. Furthermore, the present claimed threshold value control means controls the value of the second threshold value under certain circumstances. As amended above for clarification, claims 1 and 3 recite the threshold value control means as controlling, "for each vertical period, the second threshold value depending on the level of the video data at the horizontal video end position detected within the vertical period."

In contrast, **Koike** describes the horizontal image start/end detection circuit 51 as outputting a horizontal image ***start*** signal composed of a pulse signal corresponding to one sampling clock when the inputted image data R, G and B are larger than ***a*** predetermined threshold value. The horizontal image start/end detection circuit 51 outputs a horizontal image ***end*** signal composed of a pulse signal corresponding to one sampling clock when the inputted image data R, G and B are smaller than ***the*** predetermined threshold value. **Koike** discloses only one single predetermined threshold value. There is no disclosure of any different "second" threshold value. In addition, there is no disclosure for ***changing*** any second threshold value. As mentioned above, the discussion at Paragraph [0039] (column 8, lines 38 – 43) of **Koike** merely discloses the motivation or preference for initially setting the threshold value to be a large value or a small value – a single threshold value that is not changed after it is initially set.

Indeed, **Koike** teaches no more than the prior art described in the present application (see the specification, pages 1-6, the "Description of the Prior Art", Subsection [1]). As described in

that Subsection [1], the prior art threshold value for the detection of the horizontal video start and end positions of the input video signal is ***fixed***, just like in **Koike**.

In contrast, in the invention of claims 1-4, the threshold value (the second threshold value) used for detecting the horizontal video end position is controlled for each vertical period depending on the level of the video data at the horizontal, video end position detected within the vertical period. Since the second threshold value is controlled in this manner, setting the value in conformity with the input video signal with low luminance is not necessary and thus the second threshold value can be set to a large value (see, e.g., the specification, page 40, line 22 to page 41 line 11 and Fig. 4). As a result, the horizontal video effective periods L1 and L2 actually detected (see Fig. 4), approximate the theoretical value L in the horizontal video effective period, as compared with the conventional example (see Fig. 5).

For at least these reasons, the present claimed invention patentably distinguishes over the prior art.

With regard to independent claims 5 and 6, it is submitted that the cited prior art does not teach or suggest at least the claimed features of (a) judgment means for judging for each field whether or not the width of a region where input video exists is smaller than the number of horizontal effective pixels an the basis of the result of the calculation by the calculation means; and (b) means for stopping, while the width of the region where the input video exists is being judged to be smaller than the number of horizontal effective pixels, a frequency adjustment operation based on the number of sampling clocks found in the field. These claimed features correspond, for example, to the display region narrow video detection circuit 87 as shown in Fig. 7 in the embodiment. With these claimed features, the frequency adjustment operation can be

suspended, while videos in which detection of the horizontal video start and end positions is difficult, especially narrow videos which are mostly seen on a screen saver image, are being inputted. Therefore, erroneous operation can be prevented.

In contrast, **Koike** does not teach, judging, in the course of the frequency adjustment operation whether the width of the region where the input video exists is smaller than the number of horizontal effective pixels, and stopping the frequency adjustment operation when the width of the region of the input video is judged to be smaller than the number of horizontal effective pixels. For at least these further reasons, the present claimed invention of claims 5 and 6 patentably distinguish over the cited prior art.

If, for any reason, it is felt that this application is not now in condition for allowance, or if the Examiner wishes additional explanations of the present invention, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that any fees are due in connection with the filing of this paper, please charge any fees to Deposit Account No. 50-2866.

Respectfully submitted,

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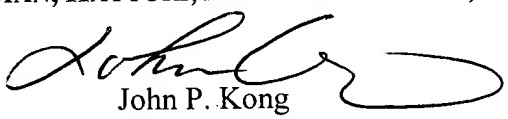

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